

## ABSTRACT OF THE DISCLOSURE

A grating-outcoupled microcavity disk resonator has whispering gallery modes existing in a nearly circular resonator. Light is outcoupled by providing a grating region in the plane of the grating-outcoupled microcavity disk resonator. The grating region provides an outcoupling or loss mechanism that symmetrically interacts with the clockwise and counterclockwise whispering gallery modes, thereby making the resonator capable of surface emission.